

REMARKS

The Examiner is thanked for the thorough examination of this application. The Office Action, however, rejected claims 1-7 and 21-23 under 35 U.S.C. § 101, as allegedly claiming the same invention as that of claims 13-20 of co-pending application serial number 10/079,667. The Office Action also rejected claims 8-20 under 35 U.S.C. § 102(b) as allegedly anticipated by U.S. Patent 6,476,816 to Deming (hereafter Deming).

Discussion of Claim Rejections

Double Patenting Rejection

The Office Action provisionally rejected claims 1-7 and 21-23 under 35 U.S.C. § 101, as allegedly claiming the same invention as that of claims 13-20 of co-pending application serial number 10/079,667. Applicant respectfully traverses this rejection.

A statutory-type double patenting rejection is proper only when the alleged conflicting claims are coextensive in scope.

Claims 18-20 were canceled by amendment in the co-pending application. Consequently, the double-patenting rejection of claims 21-23 is misplaced and should be withdrawn.

With regard to claims 1-7, Applicant respectfully submits that the claims, while similar to claims 8-13 of co-pending application serial number 10/079,667, they are not identical and consequently are not co-extensive in scope. For at least this reason, the provisional double patenting rejection should be withdrawn. Applicant does acknowledge that, if the co-pending application issues with claims that are identical to claims in the present application, it will either amend or cancel the identical claims in this application, as appropriate.

Rejections of claims

The Office Action rejected claim 8-20 as allegedly anticipated by U.S. Patent 6,476,816 to Deming. For at least the reasons set out below, Applicant respectfully disagrees.

Claim 8 recites:

8. A graphics system for processing pixel data that is associated with a predetermined pixel region, the system comprising:

memory;

controller configured to check a fill check bit that is associated with a pixel region, to determine whether it is set to indicate that all pixel data within said pixel region is the same as a predetermined reference pixel that is associated with said pixel region; and

said controller is further configured to retrieve said reference pixel data from said memory and write said reference pixel data to a sequential block of memory associated with said pixel region for each pixel within said pixel region, where said fill check bit indicates that all pixel data within said pixel region is the same as said reference pixel data.

(*Emphasis added.*) Claim 8 patently defines over the cited art for at least the reason that the cited art fails to disclose or teach the features emphasized above.

The Office Action alleges that Deming teaches the determination that a plurality of pixels within a pixel region have the same value as a reference pixel, and the writing (or filling) of the plurality of pixels in the pixel region with this pixel value. Applicant respectfully disagrees. In fact, not only does Deming *not* teach this claimed aspect, but Deming actually teaches away from this feature.

More specifically, the Office Action cites col. 5, lines 24-45 of Deming as teaching the claimed checking of "a fill check bit that is associated with a pixel region, to determine whether it is set to indicate that all pixel data within said pixel region is the same as a predetermined reference pixel." In fact, this portion of Deming actually teaches:

In accordance with other aspects of the invention, a polygon is displayed on a horizontal scan device having a plurality of pixels by dividing the polygon into a plurality of vertical stripes that are transverse to the horizontal scan of the display device, and then calculating attribute data for each of the pixels on a stripe by stripe basis. More specifically, after the polygon is divided into stripes, pixel attribute data is received for

a first pixel in a first stripe of the polygon. Each of the remaining vertical stripes have an initial pixel that corresponds to the first pixel in the first stripe. For example, if the first pixel is the bottom pixel of the first stripe, then each of the other stripes have an initial pixel that is the bottom pixel of such respective stripes. ***Gradient data relating to the degree of change of pixel attribute data with respect to the received pixel data (relating to the first pixel) also is received.*** Based upon the received data, pixel attribute data then is calculated for each initial pixel in each stripe in the polygon. ***Once the pixel attribute data is calculated for each initial pixel, then pixel attribute data for each remaining pixel in each stripe is calculated based upon the pixel attribute data for the initial pixel in each stripe in the polygon.***

(*Emphasis added.*) First, it is readily observed that this portion of Deming teaches nothing of “fill check bit,” as specifically claimed by claim 8. More significantly, however, the cited portion of Deming teaches the calculation of pixel attribute data for subsequent pixels, based on ***“gradient data relating to the degree of change of pixel attribute data with respect to the received pixel data.”*** Therefore, the cited teaching of Deming contemplates a changing value of pixel data in successive pixels, and *not* that the successive pixels will have the same value as the initial pixel (which the Office Action equated to the reference pixel value).

Consequently, the cited portion of Deming is at direct odds with what the Office Action alleged that it teaches, and at odds with what claim 8 of the present application specifically defines. For this reason alone, the rejection of claim 8 is misplaced and should be withdrawn.

Further, the Office Action alleged that the “token” of FIG. 7 of Deming anticipates the “fill check bit” of claim 8. The Office Action further cited the teaching of col. 13, lines 52-58 of Deming to support this position. Applicant respectfully disagrees.

In this regard, col. 13, lines 52-58 of Deming specifically states:

In preferred embodiments, attribute data associated with each triangle strip 400 includes a flag that, when set and read by a gradient unit 210, causes such unit 210 to pass the control token to the next peer gradient unit 210 in the chain. ***The token does not pass if the flag is not set. This ensures that triangle strips 400 are processed in the proper sequential order that is required for the image to be properly displayed.***

(Emphasis added.)

As can be readily verified by even a cursory review of this portion of Deming, this portion of Deming teaches the use of a flag and a token to ensure that triangle strips are processed in a proper sequential order (to ensure proper display of the image). Significantly, the flag and token of Deming do NOT teach a mechanism that indicates that a plurality of pixels (of a pixel region) are the same value as a reference pixel. For at least this additional reason, the application of Deming to claim 8 is misplaced and should be withdrawn.

For at least the foregoing reasons, independent claim 8 patently defines over the cited teachings of Deming, and the rejection of claim 8 should be withdrawn. Claims 9-20 each depend from claim 8 and define over the cited teachings of Deming for at least the same reasons.

Allowable Subject Matter

In view of the MPEP's admonition against piecemeal examination of applications (see MPEP 707.07(g)), Applicant presumes that the Examiner has advanced "all valid grounds available" in the rejections of the present Office Action. Therefore, since no art-based rejections were advanced against claims 1-7 or 21-23, and since Applicant has addressed the double patenting rejections of claims 1-7 and 21-23, these claims are believed to be in condition for allowance. Should any rejection be advanced against these claims, or should any new rejection be advanced against claims 8-11, in an ensuing Office Action, any such Office Action should be made non-Final.

In addition to the foregoing, Applicant notes that independent claim 1 (in addition to other features) specifically recites a "controller ... configured to set a fill check-bit associated with said pixel region where the values of all pixels within said pixel region are the same as the data representing said predetermined reference pixel." This element, defines

claim 1 over the cited art of record for reasons similar to those set forth above in connection with claim 8.

Likewise, independent claim 21 recites "setting a fill check bit associated with said pixel region to indicate that the values of all pixels within said pixel region are the same as said predetermined reference pixel." Similarly, claim 22 recites "checking a fill bit associated with said pixel region to determine whether it is set to indicate that all pixel data within said pixel region is the same as a predetermined reference pixel associated with said pixel region." These features of claims 21 and 22 clearly define those claims over the cited art of record.

Cited Art Made of Record

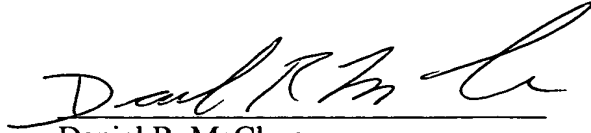
The cited art made of record but not relied upon has been considered, but is not believed to impact the patentability of the presently pending claims.

CONCLUSION

Applicants respectfully submit that all claims are now in proper condition for allowance, and respectfully request that the Examiner pass this case to issuance. If, in the opinion of the Examiner, a telephonic conference would expedite the examination of this matter, the Examiner is invited to call the undersigned attorney at (770) 933-9500.

No fee is believed to be due in connection with this Amendment and Response to Office Action. If, however, any fee is deemed to be payable, you are hereby authorized to charge any such fee to Hewlett-Packard Company's Deposit Account No. 80-2025.

Respectfully submitted,

A handwritten signature in dark ink, appearing to read "Daniel R. McClure", is written over a horizontal line.

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Please continue to send all future correspondence to:

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